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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,651	03/23/2004	Stephen V. Saliga	72255/00019	2573

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EXAMINER	
YUN, EUGENE	

ART UNIT	PAPER NUMBER
2618	

NOTIFICATION DATE	DELIVERY MODE
06/02/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/806,651	SALIGA ET AL.	
	Examiner	Art Unit	
	EUGENE YUN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-13,16-24 and 27-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 6-13, 16-24, and 27-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/5/2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4, 6-13, 16-24, and 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proctor et al. (US 7,233,627) in view of Neagley et al. (US 6,434,372) and Capdepuy et al. (US 4,821,045).

Referring to Claim 1, Proctor teaches a configurable antenna system comprising:

An antenna arrangement configured to selectively vary between first and second operational positions (see col. 5, lines 37-41);

Wherein in the first operational position, the antenna arrangement operates in an omni-operational antenna mode (see col. 5, line 40); and

Wherein the second operational position, the antenna arrangement operates in a directional antenna mode (see col. 5, line 41).

Proctor does not teach a signal reflecting member positioned to cooperate with the antenna arrangement while the antenna arrangement is in the second operational position, to establish a directional antenna mode configuration that is perpendicular to the signal reflecting member, and a pivot member coupled to the antenna arrangement for pivotally varying the antenna between the first and second operational positions. Neagley teaches a signal reflecting member positioned to cooperate with the antenna arrangement while the antenna arrangement is in the second operational position, to establish a directional antenna mode configuration that is perpendicular to the signal reflecting member (see col. 6, lines 14-23), and a pivot member coupled to the antenna arrangement for pivotally varying the antenna between the first and second operational positions (see col. 11, lines 49-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Neagley to said device of Proctor in order to provide a more clear reflected signal while reducing radiation.

The combination of Proctor and Neagley does not teach the first operational position the antenna arrangement perpendicular with the signal reflecting member and in the second operational position the antenna arrangement parallel with the signal reflecting member. Capdepuy teaches the first operational position the antenna arrangement perpendicular with the signal reflecting member and in the second operational position the antenna arrangement parallel with the signal reflecting member

(see col. 2, lines 16-32 noting that the antenna device is either parallel or perpendicular to one reflector according to its rotation about the axis (delta)). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Capdepuy to the modified device of Proctor and Neagley in order to operate more efficiently at higher frequencies.

Referring to Claim 10, Proctor teaches a wireless access point for a wireless local area network comprising:

A radio component comprising suitable radio electronics circuitry for converting electronic signals back and forth into wireless radio frequency signals (see 100 in fig. 1);

An antenna arrangement for transmitting and receiving the wireless radio frequency signals, and configured to selectively vary between first and second operational positions (see col. 5, lines 37-41);

Wherein in the first operational position, the antenna arrangement operates in an omni-directional antenna mode (see col. 5, line 40); and

Wherein in the second operational position, the antenna arrangement operates in a directional antenna mode (see col. 5, line 41).

Proctor does not teach a signal reflecting member positioned to cooperate with the antenna arrangement while the antenna arrangement is in the second operational position, to establish a directional antenna mode configuration that is perpendicular to the signal reflecting member, and a pivot member coupled to the antenna arrangement for pivotally varying the antenna between the first and second operational positions. Neagley teaches a signal reflecting member positioned to cooperate with the antenna

arrangement while the antenna arrangement is in the second operational position, to establish a directional antenna mode configuration that is perpendicular to the signal reflecting member (see col. 6, lines 14-23), and a pivot member coupled to the antenna arrangement for pivotally varying the antenna between the first and second operational positions (see col. 11, lines 49-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Neagley to said device of Proctor in order to provide a more clear reflected signal while reducing radiation.

The combination of Proctor and Neagley does not teach the first operational position the antenna arrangement perpendicular with the signal reflecting member and in the second operational position the antenna arrangement parallel with the signal reflecting member. Capdepuy teaches the first operational position the antenna arrangement perpendicular with the signal reflecting member and in the second operational position the antenna arrangement parallel with the signal reflecting member (see col. 2, lines 16-32 noting that the antenna device is either parallel or perpendicular to one reflector according to its rotation about the axis (delta)). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Capdepuy to the modified device of Proctor and Neagley in order to operate more efficiently at higher frequencies.

Referring to Claim 20, Proctor teaches a method of antenna operation in a wireless telecommunications system comprising:

Operating an antenna arrangement in an omni-directional mode while the antenna arrangement is in a first position (see col. 5, line 40); and

Operating the antenna arrangement in a directional antenna mode while the antenna arrangement is in a second position (see col. 7, lines 62 to col. 8, line 4).

Proctor does not teach the antenna arrangement substantially perpendicular with a signal reflecting member while in the first position. Neagley teaches the antenna arrangement substantially perpendicular with a signal reflecting member while in the first position (see col. 6, lines 14-23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Neagley to said device of Proctor in order to provide a more clear reflected signal while reducing radiation.

The combination of Proctor and Neagley does not teach the antenna arrangement substantially parallel with the signal reflecting member while in the second position, wherein the signal reflecting member reflects signal from the antenna arrangement in a direction that is substantially perpendicular to the reflecting member while the antenna arrangement is in the second position. Capdepuy teaches the antenna arrangement substantially parallel with the signal reflecting member while in the second position, wherein the signal reflecting member reflects signal from the antenna arrangement in a direction that is substantially perpendicular to the reflecting member while the antenna arrangement is in the second position (see col. 2, lines 16-32 noting that the antenna device is either parallel or perpendicular to one reflector according to its rotation about the axis (delta)). Therefore, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to provide the teachings of Capdepuy to the modified device of Proctor and Neagley in order to operate more efficiently at higher frequencies.

Referring to Claims 2, 11, and 21, Proctor also teaches a diversity pair of omni-directional antennas (see fig. 5A).

Referring to Claims 3, 12, and 22, Proctor also teaches the diversity pair of omni-directional antennas formed on a circuit board (see col. 5, lines 1-10).

Referring to Claims 4, 13, and 23, Proctor also teaches a switch for detecting whether the antenna arrangement is in a respective one of the first operational position, for enabling the omni-directional antenna mode, and the second operational position, for enabling the directional operational mode (see col. 6, lines 43-48).

Referring to Claim 24, Neagley also teaches a pivot member for pivotally varying the antenna arrangement between the first and second antenna positions (see col. 11, lines 49-56).

Referring to Claim 6, Capdepuy also teaches the antenna arrangement in the first operational position substantially perpendicular with respect to the signal reflecting member, and wherein the antenna arrangement in the second operational position substantially parallel with respect to the signal reflecting member (see col. 2, lines 16-32).

Referring to Claims 7, 16 and 27, Proctor also teaches that in the second operation position, the antenna arrangement is substantially proximate to the signal

reflecting member, to provide a signal reflection from the antenna arrangement (see col. 7, lines 62 to col. 8, line 4).

Referring to Claims 8 and 17, Proctor also teaches the signal reflecting member formed integrally with a metal and reflective access point housing (see col. 7, lines 62 to col. 8, line 4).

Referring to Claim 9, Proctor also teaches the antenna system incorporated in a wireless access point for use with a wireless local area network (see col. 7, lines 55-61).

Referring to Claim 18, Proctor also teaches the radio component comprising means for converting signals between a wireless protocol and a wired network protocol (see col. 6, line 63 to col. 7, line 15).

Referring to Claim 19, Proctor also teaches converting signals from between the IEEE 802.11 wireless protocol and the IEEE 802.3 wired network protocol (see col. 6, line 63 to col. 7, line 15).

Referring to Claims 28 and 30, Neagley also teaches a media access control processor operably coupled to the switch and configured to operate at a first power level when the switch is in the first operational position and at a second power level when the switch is in the second operational position (see col. 10, lines 25-40 noting that no further detail is made regarding the operating position).

Referring to Claim 29, Neagley also teaches the second power level higher than the first power level (see col. 10, lines 34-36).

Referring to Claim 31, Neagley also teaches setting a power level of a transmitter coupled to the antenna based on whether the detected operational position of the antenna arrangement;

wherein the power level is automatically set to a lower level responsive to determining the detected operational position has changed from the first operational position to the second operational position (see col. 10, lines 25-40 noting that no further detail is made regarding the operating position).

Referring to Claim 32, Capdepuy also teaches that wherein in the first operational position the antenna system radiates parallel to the reflective surface and in the second operational position the antenna system radiates perpendicular to the reflective surface (see col. 2, lines 16-32).

Response to Arguments

4. Applicant's arguments with respect to claims 1-4, 6-13, 16-24, and 27-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUGENE YUN whose telephone number is (571)272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571)272-4177. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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